

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-180-AD; Amendment 39-13394; AD 2003-25-11]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing airplane models, that requires a one-time inspection to identify all H-11 steel bolts installed in the latch fittings of the cargo doors, repetitive inspections for cracked or broken H-11 steel bolts, and follow-on and corrective actions if necessary. This amendment also requires eventual replacement of all H-11 steel bolts in the latch fittings of the cargo doors with Inconel bolts. This action is necessary to prevent broken bolts in the latch fittings, which could reduce the capability of the door latch to keep the door closed, and result in loss of a cargo door and consequent rapid depressurization of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective January 27, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 27, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Nick Kusz, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6432; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP series airplanes was published in the Federal Register on August 27, 2003 (68 FR 51521). That action proposed to require a one-time inspection to identify all H-11 steel bolts installed in the latch fittings of the cargo doors, repetitive inspections for cracked or broken H-11 steel bolts, and follow-on and corrective actions if necessary. That action also proposed to require eventual replacement of all H-11 steel bolts in the latch fittings of the cargo doors with Inconel bolts.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 566 airplanes of the affected design in the worldwide fleet. The FAA estimates that 179 airplanes of U.S. registry will be affected by this AD, that it will take between 2 and 8 work hours per airplane (depending on the airplane's configuration) to accomplish the required inspection, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be between \$130 and \$520 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2003-25-11 Boeing: Amendment 39-13394. Docket 2001-NM-180-AD.

Applicability: Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP series airplanes; line numbers 1 through 721 inclusive, 976, and 982; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent bolts from breaking in the latch fittings of the cargo doors, which could reduce the capability of the door latch to keep the door closed, and result in loss of a cargo door and consequent rapid depressurization of the airplane, accomplish the following:

Service Bulletin References

(a) The following information pertains to the service bulletin referenced in this AD:

(1) The term "service bulletin" as used in this AD, means the Accomplishment Instructions of Boeing Service Bulletin 747-53A2464, Revision 1, dated August 30, 2001.

(2) Although the service bulletin referenced in this AD specifies to submit certain information to the manufacturer, this AD does not include such a requirement.

(3) Although the service bulletin specifies that the actions therein must be accomplished prior to or concurrently with the actions in Boeing Alert Service Bulletin 747-52A2167 and Boeing Service Bulletin 747-52-2197, this AD does not include such a requirement. AD 80-14-11, amendment 39-3831, already requires accomplishment of Boeing Alert Service Bulletin 747-52A2167, Revision 1, dated March 28, 1980.

(4) Inspections and replacements accomplished before the effective date of this AD per Boeing Alert Service Bulletin 747-53A2464, dated March 15, 2001, are considered acceptable for compliance with this AD.

Initial Inspection

(b) Within 1 year after the effective date of this AD: Do a one-time detailed inspection to identify all H-11 steel bolts installed in the latch fittings of the main deck side cargo door, nose cargo door, and the forward and aft lower lobe cargo doors, as applicable. Do the inspection by checking the bolt part number stamped on the bolt head, or verifying the bolt is steel by using a magnet, per the service bulletin. If no H-11 steel bolt is found, no further action is required by this paragraph. If any H-11 steel bolt is found, do the requirements of paragraph (c) of this AD.

Note 1: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Follow-On Inspections/Corrective Actions

(c) For any H-11 steel bolt found during any inspection required by paragraph (b) of this AD: Before further flight, do an ultrasonic inspection for cracked or broken bolts, or replace the H-11 steel bolt with an Inconel bolt, per the service bulletin. Replace any cracked or broken bolt with an Inconel bolt before further flight per the service bulletin. Repeat the ultrasonic inspection of remaining H-11 steel bolts in the latch fittings of the main deck side cargo door, nose cargo door, and the forward and aft lower lobe cargo doors, at intervals not to exceed 18 months until the terminating action required by paragraph (d) of this AD is done.

Terminating Action

(d) Within 6 years after the effective date of this AD: Replace, with Inconel bolts, all H-11 steel bolts in the latch fittings of the main deck side cargo door, nose cargo door, and the forward and aft lower lobe cargo doors, per the service bulletin. The procedures for this replacement include performing a detailed inspection of the bolt hole for corrosion; oversizing the bolt hole to remove any corrosion; installing a new bolt, nut, and washers; and applying sealant. Such replacement terminates the repetitive inspections required by paragraph (c) of this AD. If corrosion is found and oversizing the bolt hole within the limits specified in the service bulletin is not adequate to remove the corrosion, before further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved, the approval must specifically reference this AD.

Parts Installation

(e) As of the effective date of this AD: No person may install, on any airplane, an H-11 steel bolt in the latch fittings of the main deck side cargo door, nose cargo door, or the forward and aft lower lobe cargo doors.

Alternative Methods of Compliance

(f) In accordance with 14 CFR 39.19, the Manager, Seattle ACO, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(g) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-53A2464, Revision 1, dated August 30, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on January 27, 2004.

Issued in Renton, Washington, on December 11, 2003.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-31195 Filed 12-22-03; 8:45 am]

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